

August 2, 2011

California Energy Commission
Dockets Office, MS-4
Re: Docket No. 11-IEP-1J
1516 Ninth Street
Sacramento, CA 95814-5512

DOCKET
11-IEP-1J
DATE <u>AUG 02 2011</u>
RECD. <u>AUG 02 2011</u>

Re: "California Nuclear Power Plant Issues"

Dear Members of the California Energy Commission:

The purpose of the Committee Workshop stated under the heading "Purpose" seeking public comment on issues related to plant vulnerabilities, should instead be issues related to surrounding community vulnerabilities to nuclear accidents.

In a recent opinion piece about a simultaneous financial and nuclear disaster in Japan, Nobel economist Joseph Stiglitz wrote the following: **"A system that socializes losses and privatizes gains is doomed to mismanage risk."** That describes quite accurately the nuclear industry that, since its inception, has been allowed to recklessly expose the public to disasters and health risks beyond comprehension and yet have almost no liability due to lax regulation, industry misinformation campaigns, and the Price Anderson Act.

I live in North County San Diego, 29 miles from the San Onofre Nuclear Generating Station and recently came across this important study published in 2005. (PDF copy is attached to this email.) Here is a quote from the abstract of that study titled:

Paleoseismic features as indicators of earthquake hazards in North Coastal, San Diego County, California, USA

By Gerald G. Kuhn, 8 April 20005
Engineering Geology 80 (2005) 115-150

"New road cut and mass-grading excavations in the north coastal area of San Diego County, California expose heretofore generally unrecognized, probable late Holocene tsunami deposits and paleoseismically deformed sediments. Remnant tsunami deposits occur up to 100 + m in elevation around the margins of modern coastal lagoons and estuaries...Based on their regional extent, the paleoseismic features were likely caused by M~7+ tectonic events inferentially generated by the nearby offshore Newport-Inglewood/Rose Canyon fault system, or possibly by smaller, recently exposed, related and localized faults. Accordingly, the seismic hazard of the north coastal area of San Diego County may be substantially higher than previously assumed, and hence of concern owing to the rapid ongoing and projected population increase."

In response to Docket No. 11-IEP-1J Attachment A “Key Issues and Questions for the Workshop”,

1. a. It is important to acknowledge the evidence of tsunami deposits at high elevations near the San Onofre Nuclear Generating Station. We don’t usually get advanced warning of natural disasters but this tsunami evidence should be considered a warning to key decision makers such as yourself that San Onofre is located in a tsunami zone with a history of large tsunamis.

2. d. Any predictions of future seismic activity along the coastal fault system will be based on many assumptions. The tsunami evidence however is proof of past events and signals the possibility of such events occurring again. San Onofre Nuclear Generating Station was designed and built prior to the discovery of these tsunami deposits near to the power plant. That fact is evidenced by the dangerously low location of the spent fuel storage pools sited close to sea level.

Even if the plant had been built with an awareness of the tsunami evidence, it took the nuclear disaster at Fukushima to clearly illustrate what the tragic combination of seismic faults, tsunamis, and nuclear power plant can mean to surrounding regions and populations.

3. a. Why would there be a less stringent standard for any U.S. nuclear power plant? Why is the Commission concerned with the cost to Southern California Edison for plant upgrades, rather than being concerned with the health costs and economic cost to the surrounding communities if a nuclear accident happened at San Onofre? SCE chose to operate a nuclear power plant and has cleverly set up their business model to make money regardless of what happens at the plant, so the cost of safety upgrades should be their operational issue not the Commission’s. The responsibility of the regulatory agencies should be first and foremost to ensure the public’s safety when evaluating the immense dangers that an aging nuclear power plant poses to the surrounding, densely populated community.

3. f. The economic impact to property values of all the public and private properties in LA, Orange, Riverside, San Bernardino, San Diego Counties that fall within a 50 mile uninhabitable radioactive exclusion zone equaling 1,963.5 square miles (1,125,637 acres) if calculated at a conservative average of \$100,000 dollars per acre, would be **\$1.125 trillion dollars in lost property value.** That does not include the lost businesses, the lost land improvements, the \$ Billions in public infrastructure rendered useless, the agricultural zones that can no longer produce food, the associated lost man-hours of work, and the medical costs of those who fall ill or develop cancer.

3. i. SCE should take its cue from Germany, Switzerland, and Japan, and divest itself from nuclear power plants from a purely economic point of view. The technology and plant facilities are inherently unstable when impacted by natural disasters. Nuclear meltdowns and fallout can not be mitigated, and there is a growing anti-nuclear awareness in the public that will eventually result in shutting down Diablo Canyon and

San Onofre. SCE should be leading the push toward cleaner, safer energy technologies and more efficient end use by consumers of their electricity.

3. j. The Price Anderson Fund at \$12.2 Billion would not come close to covering the potential losses from a nuclear power plant disaster especially if it occurs in a highly urbanized area of California, **the Eighth Largest Economy In the World** with an economic output of \$1.847 trillion in 2008. A nuclear disaster at San Onofre and resulting exclusion zone would destroy the Southern California region's ability to function. This is a region that is highly urbanized and industrialized. Risking California's economy for only 7.5% of California's energy production is absolutely insane. Of course the public would pay the price ultimately both in terms of destruction to our lives and livelihoods, and in terms of footing the bill through federal government bailouts of the nuclear industry via the Price Anderson Act and consumer rate increases at power plants nationwide.

3. k. Fukushima now has a highly radioactive contamination zone out to 48.4 miles from the melted-down reactors. If that zone was superimposed on San Onofre it would extend northward to the Port of Los Angeles, one of the busiest container ports in the world, and the busiest container port in the U.S. The 48.4 mile zone would extend southward through the Marine Base at Camp Pendleton, all the way to the City of San Diego near the San Diego Airport and Naval Base in the San Diego Harbor. The 48.4 mile zone would extend eastward past Temecula and Hemet more than half way to Palm Springs. The 48.4 mile zone would extend westward to Catalina Island.

The zone would encompass a highly urbanized and industrial area with a population of 7.4 million people. If a nuclear accident was triggered by an offshore earthquake / tsunami, 7.4 million people would be downwind of San Onofre and would need to evacuate or shelter-in-place. Have you ever seen a mass exodus of 7.4 million people? Where would they go for weeks or months or indefinitely like what is happening in Fukushima? How would 7.4 million men, women, and children shelter-in-place if homes and building structures across the region are quake damaged and can't be sealed off with duct tape? Shelter-in-place with duct tape over the borders of doors and windows is what the emergency agencies recommend as the first line of defense from radioactive fallout. Shelter-in-place would be a naive mistake with deadly consequences for radioactive fallout victims.

Any emergency plan that proposes that 7.4 million people flee in their cars or shelter-in-place indefinitely is an absurd idea rooted in ignorance and gross miscalculation. The region will be in a panic, roadways, freeway, overpasses, and power distribution will be damaged, food will be running scarce, emergency responders will be dealing with their own families in crisis, and all areas to flee toward will be inconveniently downwind of San Onofre. In Bhopal India the Union Carbide industrial accident that caused 3,787 deaths and 558,125 injuries, happened in the night while the surrounding community was sleeping so evacuation was never an option for the victims.

I urge the members of the Commission to pressure the Nuclear Regulatory Commission

and the management of Southern California Edison to give meaningful and responsible answers to the following questions about the immense risks that SCE poses to the southern half of the State of California. I also urge the Commission to consider the simple fact that **we as a society simply do not need nuclear power plants.** To put it into perspective, a nuclear accident at San Onofre would amount to an eviction notice to the southern portion of a State that is considered the 8th largest economy in the world and home to several key military bases!

Sincerely,

Torgen Johnson
Solana Beach, CA 92075
Torgen2@hotmail.com